integral with, stator frame (102). A plurality of spacer bars (152) provide support for cooling conduit (142) and facilitate maintaining a desired spacing between a plurality of lengths of cooling conduit (142) and between conduit (142) and a stator frame wall. Notably, in contrast to the present invention, Crowell does not describe nor suggest a spacer bar having a notched side and at least one finger projecting outwardly from the notched side wherein the at least one finger is configured for crimping circumferentially around the cooling conduit to mechanically couple the spacer bar to the cooling conduit.

Claim 1 recites a stator frame for an electric motor that includes a cooling conduit, and "at least one spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger configured for crimping circumferentially around said cooling conduit to mechanically couple said spacer bar to said cooling conduit."

Crowell does not describe nor suggest a stator frame for an electric motor that includes at least one spacer bar having a notched side and at least one finger projecting outwardly from the notched side, wherein the at least one finger is configured for crimping circumferentially around a cooling conduit to mechanically couple the spacer bar to the cooling conduit. Rather, Crowell describes a liquid cooled electric motor stator frame that includes a plurality of spacer bars, but does not describe nor suggest spacer bars having a notched side and at least one finger projecting outwardly from the notched side, wherein the at least one finger is configured for crimping circumferentially around a cooling conduit to mechanically couple the spacer bar to the cooling conduit. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Crowell.

Claims 2-7 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-7 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-7 likewise are patentable over Crowell.

Claim 8 recites an electric motor that includes a cooling conduit, and "at least one spacer bar mechanically coupled to said cooling conduit...said spacer bar comprising a notched side

03-DV-7116 PATENT

and at least one finger projecting outwardly from said notched side, said at least one finger configured for crimping circumferentially around said cooling conduit."

Crowell does not describe nor suggest an electric motor that includes a cooling conduit, and at least one spacer bar mechanically coupled to the cooling conduit, wherein the spacer bar includes a notched side and at least one finger is projecting outwardly from the notched side, wherein the at least one finger is configured for crimping circumferentially around the cooling conduit. Rather, Crowell describes a liquid cooled electric motor stator frame that includes a plurality of spacer bars, but does not describe nor suggest spacer bars having a notched side and at least one finger projecting outwardly from the notched side, wherein the at least one finger is configured for crimping circumferentially around a cooling conduit. For at least the reasons set forth above, Claim 8 is submitted to be patentable over Crowell.

Claims 9-15 depend, directly or indirectly, from independent Claim 8. When the recitations of Claims 9-15 are considered in combination with the recitations of Claim 8, Applicants submit that dependent Claims 9-15 likewise are patentable over Crowell.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-15 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

Daniel M. Fitzgerald Registration No. 38,880

ARMSTRONG TEASDALE LLP One Metropolitan Square, Suite 2600

St. Louis, Missouri 63102-2740

(314) 621-5070





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dunlap et al.

Art Unit: 2834

Serial No.: 09/682,501

Examiner: Tamai, K.

Filed: September 10, 2001

011001 10, 2001

MECHANICAL JOINING FOR WATER-COOLED MOTOR

FRAME

For:

SUBMISSION OF MARKED UP CLAIMS

Hon. Commissioner for Patents Washington, D.C. 20231

Submitted herewith are marked up claims in accordance with 37 CFR 1.211(c)(1)(ii).

IN THE CLAIMS

1. (once amended) A stator frame for an electric motor, said stator frame comprising:

a substantially cylindrical shaped body section having opposed ends, and a cooling passageway extending through at least a portion of said body section, said cooling passageway comprising a cooling conduit;

an inlet port and an outlet port in flow communication with said cooling passageway; and

at least one spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said [spacer bar configured] at least one finger configured for crimping circumferentially around said cooling conduit to mechanically couple said spacer bar to said cooling conduit.

03-DV-7116 PATENT

8. (once amended) An electric motor, comprising:

a stator frame comprising a substantially cylindrical shaped body section having opposed first and second ends, and a cooling passageway extending through at least a portion of said body section, said frame further comprising an inlet port and an outlet port in flow communication with said cooling passageway, said cooling passageway comprising a cooling conduit;

a first end shield secured to said first stator frame end;

a second end shield secured to said second stator frame end; and

at least one spacer bar mechanically coupled to said cooling conduit, said spacer bar comprising a notched side and at least one finger projecting outwardly from said notched side, said at least one finger configured for crimping circumferentially around said cooling conduit.

Respectfully Submitted,

Daniel M. Fitzgerald

Registration No. 38,880

ARMSTRONG TEASDALE LLP

One Metropolitan Square, Suite 2600

St. Louis, Missouri 63102-2740

(314) 621-5070